

## NOTES ON GEOGRAPHIC DISTRIBUTION

### Amphibia, Anura, Hylidae, *Hypsiboas secedens*: Reassessment of type locality coordinates and distribution extension

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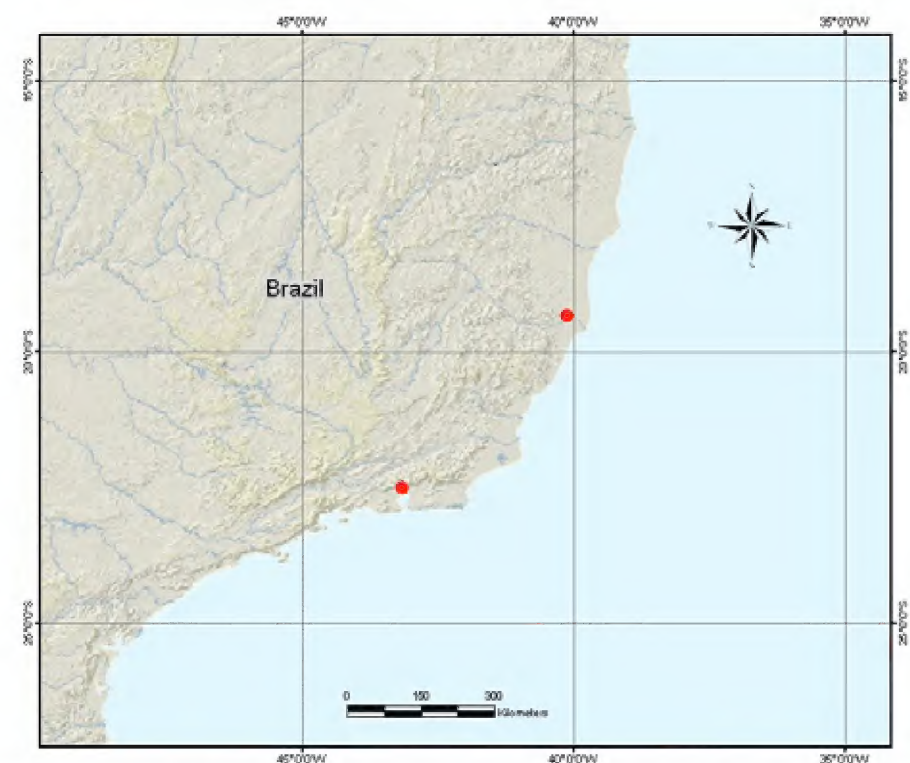
*Hypsiboas secedens* (Lutz, 1963) belongs to the *Hypsiboas pulchellus* species group, which is presently composed of 30 species. This group was proposed by Faivovich et al. (2005) based on phylogenetic analysis using DNA and morphological data. In the original publication (Lutz 1963), the type locality of *Hypsiboas secedens* was given as Barro Branco, in the state of Rio de Janeiro (ca. 22°23' S, 43°15' W) yet, the holotype (Figure 1) and 29 paratypes were bought from a commercial collector (A. Passarelli) whose indications of collecting localities were generally accurate. The species was recorded at *Reserva Ecológica de Sooretama* (former *Parque de Sooretama*), municipality of Linhares, Espírito Santo by Bokermann (1966a) (Figure 2).



**Figure 1.** *Hypsiboas secedens*, holotype, adult male (MNRJ 3591). Photo by T. Silva-Soares.

IUCN (2008) listed *H. secedens* as Data Deficient (DD), due to the continuous uncertainties about its taxonomic status, extent of occurrence, and

ecological requirements. The species was described nearly five decades ago but still lacks data on its geographic distribution, reproductive biology, and ecology.



**Figure 2.** Previous known range of *Hypsiboas secedens*. Arrows indicate the two prior localities reported for this species. Reserva Ecológica de Sooretama, municipality of Linhares, Espírito Santo (erroneous record; re-identified as *H. pombali*) and Barro Branco, state of Rio de Janeiro (type locality). Source: Global Amphibian Assessment.

Based on our analysis, we determined that the coordinates for the type locality Barro Branco are incorrectly stated in the original publication by Lutz (1963) and are herein rectified to 22°37' S, 43°15' W. This error probably occurred due to



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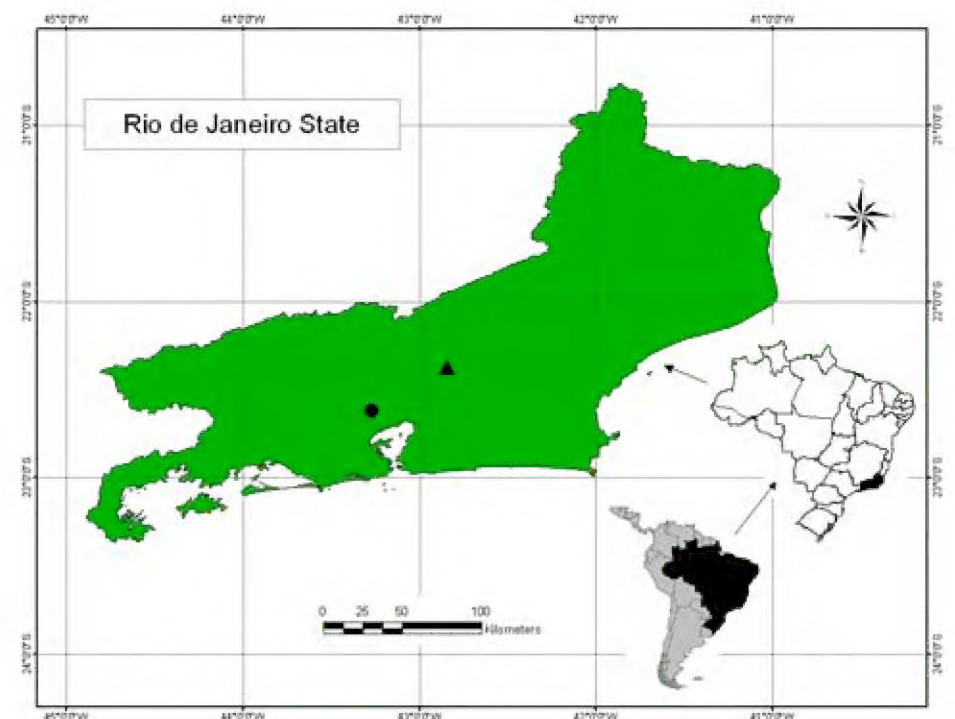
erroneous type locality information and the fact that the type-series was not taken by the author herself. Furthermore, Bokermann (1966b) synonymized Barro Branco with Cidade das Meninas, but this is also erroneous since both sites are located ca. 12 km from each other.

Caramaschi et al. (2004) pointed out that the specimen referred by Bokermann (1966a) as *H. secedens* is in fact *Hypsiboas pombali* (Caramaschi et al. 2004) (Figure 3). Thus, considering that the specimen from Linhares, Espírito Santo is actually *Hypsiboas pombali*, the record of *H. secedens* from the state of Espírito Santo should be eliminated, decreasing the distribution range of the species to Barro Branco, municipality of Duque de Caxias, state of Rio de Janeiro.



**Figure 3.** Paratype of *Hypsiboas pombali*, adult male collected at *Parque Estadual Serra do Canduru*, municipality of Itacaré, Bahia, Brazil. (MNRJ 35243). Photo by T. Silva-Soares.

During a field expedition in September 2007 to the *Reserva Ecológica de Guapiaçu* - REGUA, municipality of Cachoeiras de Macacu, state of Rio de Janeiro (22°25' S, 42°44' W, 140 m, Figure 4), we collected one specimen of *Hypsiboas secedens* (Figure 5) sitting at night on a branch of a tree about 2 m above the floor, near a stream. No calling activity of this arboreal nocturnal species was noticed. The specimen is housed at the amphibian collection of the *Universidade Federal do Rio de Janeiro* (ZUFRJ 10293). This new record is the first confirmed report outside its type locality and extends the distributional range of the species ca. 58 km NE considering the correct coordinates.



**Figure 4.** Currently known distribution of *Hypsiboas secedens*: dot - type locality; triangle - new record at Cachoeiras de Macacu, state of Rio de Janeiro, Brazil.



**Figure 5.** *Hypsiboas secedens*, young individual collected at *Reserva Ecológica de Guapiaçu*, municipality of Cachoeiras de Macacu, Rio de Janeiro, Brazil. (ZUFRJ 10319; SVL 37,8 mm). Photo by T. Silva-Soares.

Two additional specimens of *Hypsiboas secedens* were found in the amphibian collection of the *Museu Nacional do Rio de Janeiro*. Specimen MNRJ 40609 was collected by R.V. Marra at REGUA in October 2004; and MNRJ 40615 by F.H. Hatano in November 2004 at *Estação Ecológica Paraíso*, municipality of Guapimirim (Figure 6).



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**Figure 6.** Adult males of *Hypsiboas secedens* deposited at the MNRJ Amphibian Collection. (MNRJ 40609; SVL 53,6 mm and MNRJ 40615; 55,1 mm) Photo by T. Silva-Soares.

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### Literature cited

- Bokermann, W. C. A. 1966a. Notas sobre Hylidae do Espírito Santo (Amphibia, Salientia). *Revista Brasileira de Biologia* 26 (1): 29-37.
- Bokermann, W. C. A. 1966b. Lista Anotada das Localidades Tipo de Anfíbios Brasileiros. São Paulo. Serviço de Documentação da Reitoria da Universidade de São Paulo. 183p.
- Caramaschi, U., B. V. S. Pimenta and R. N. Feio. 2004. Nova espécie do grupo de *Hyla geographica* Spix, 1824 da Floresta Atlântica, Brasil (Amphibia, Anura, Hylidae) *Boletim do Museu Nacional, Nova Série Zoologia* 518:1-14.
- Faivovich, J., C. F. B. Haddad, P. C. A. Garcia, D. R. Frost, J. A. Campbell and W. C. Wheeler. 2005.



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Systematic review of the frog family Hylidae, with special reference to Hyalinae: a phylogenetic analysis and taxonomic revision. *Bulletin of the American Museum of Natural History* 294: 1-240.

IUCN, Conservation International, and NatureServe. 2007. *Global Amphibian Assessment*, 2004. Accessible at: [www.globalamphibians.org](http://www.globalamphibians.org). Captured on June 2008.

Lutz, B. 1963. New species of *Hyla* from Southeastern Brazil. *Copeia* 1963 (3): 561-562

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